

IN THE APPLICATION:

Please insert pages 1-12 of the Sequence Listing enclosed herewith.

AMENDMENTS TO THE SPECIFICATION:

At page 1, after the title and before the section entitled "FIELD OF THE INVENTION" insert the following paragraphs:

CROSS REFERENCE TO RELATED APPLICATIONS

This application is the U.S. National Stage filing for International Application Serial No. PCT/US2005/008428 filed March 15, 2005, which claims priority to US Provisional Patent Applications 60/553,646 filed March 15, 2004, 60/567,016 filed April 29, 2004, 60/609,516 filed September 13, 2004, each of which is incorporated herein by reference in its entirety.

SEQUENCE LISTING

A sequence listing is filed herewith in accordance with CFR 1.821 and is hereby incorporated by reference.

Please replace the paragraph at page 84, beginning with line 31 and continuing to page 85 lines 1-11 with the following paragraph:

Oligodeoxyribonucleotides of sequence CTACGCTTCCACGCACAGT (SEQ ID #1) were prepared with nucleotide modifications positioned within the region preferentially cleaved by human RNase H1, as indicated below, where (x) shows the position of the modification for the respective oligodeoxyribonucleotide (positions are numbered 5'→3' on the oligodeoxyribonucleotide.)

T7: CTACGCxTTCCACGCACAGT (SEQ ID NO: 29)

T8: CTACGCTxTCCACGCACAGT (SEQ ID NO: 30)

T9: CTACGCTTxCCACGCACAGT (SEQ ID NO: 31)

C10: CTACGCTTxCACGCACAGT (SEQ ID NO: 32)

C11: CTACGCTTTCxACGCACAGT (SEQ ID NO: 33)

A12: CTACGCTTCCxCGCACAGT (SEQ ID NO: 34)

C13: CTACGCTTCCAxGCACAGT (SEQ ID NO: 35)

G14: CTACGCTTCCACxCACAGT (SEQ ID NO: 36)
C15: CTACGCTTCCACGxCACAGT (SEQ ID NO: 37)

Please replace the paragraph at page 98, lines 8-28 with the following paragraph:

Each oligonucleotide incorporated one or two transition nucleotides positioned at the junction, or junctions, between regions of nucleotides comprising a particular sugar conformation and another region of nucleotides comprising a different sugar conformation. The modifications are indicated below, where (x) shows the position of the modification for the respective oligodeoxyribonucleotide (positions are numbered 5'→3' on the oligodeoxyribonucleotide.)

T ₄	<u>AGTxAGGTCTCCGATCGTC</u>	<u>(SEQ ID NO: 38)</u>
T ₅	<u>AGTTxAGGTCTCCGATCGTC</u>	<u>(SEQ ID NO: 39)</u>
A ₆	<u>AGTTTxGGTCTCCGATCGTC</u>	<u>(SEQ ID NO: 40)</u>
G ₇	<u>AGTTTAXGTCTCCGATCGTC</u>	<u>(SEQ ID NO: 41)</u>
G ₈	<u>AGTTTAGTxTCTCCGATCGTC</u>	<u>(SEQ ID NO: 42)</u>
C ₁₃	<u>AGTTTAGGTCTCxGATCGTC</u>	<u>(SEQ ID NO: 43)</u>
G ₁₄	<u>AGTTTAGGTCTCCxATCGTC</u>	<u>(SEQ ID NO: 44)</u>
A ₁₅	<u>AGTTTAGGTCTCCGxTCGTC</u>	<u>(SEQ ID NO: 45)</u>
T ₁₆	<u>AGTTTAGGTCTCCGAXCGTC</u>	<u>(SEQ ID NO: 46)</u>
C ₁₇	<u>AGTTTAGGTCTCCGATxGTC</u>	<u>(SEQ ID NO: 47)</u>
A ₆ -T ₁₆	<u>AGTTTxGGTCTCCGAXCGTC</u>	<u>(SEQ ID NO: 48)</u>

The heteroduplex substrate containing the oligonucleotides were prepared as described in example 4, and the turnover kinetics determined as described in example 5. The results are shown below in table XII.